



# Tesla Forum of WA Inc.

Perth, Western Australia

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## Tesla Forum -

The TESLA FORUM is a community non-profit organization dedicated to the legacy of Nikola Tesla, scientist and inventor, whose life and work symbolize the triumph of science, peace and cooperation among nations.

The Forum's mission is recognition of Nikola Tesla's work and his contribution to the modern world.

**Tesla Forum's objective is to promote the science and education among Australian youth.**

## History -

November 2003 – Tesla Forum established as a community group in Perth, Western Australia.

20 April 2004 – Tesla Forum of WA Inc. incorporated in Western Australia.

The Apollo 11, 12 and 14 missions of the late 1960s carried "dust detectors" that were invented by Perth physicist Dr Brian O'Brien



Neil Armstrong on moon, 20 July 1969

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## *Tesla Day Dinner 2009*

**At 7:00pm on SATURDAY 11th OF JULY 2009**  
**PARMELIA HILTON HOTEL, PERTH**

The dinner is organised for the 6<sup>th</sup> consecutive year as part of the Tesla Day celebrations in Western Australia. We will have an evening full of good spirit and great music. Dr Brian O'Brien, physicist, will speak at this year's dinner. He is a highly respected scientist, who amongst other things is a former NASA Principle Investigator with the Apollo space program. His lecture will be on:

**"From Antarctic Auroras to Dust on the Moon"**

Dr O'Brien will present some of his delights in scientific discoveries since going to the Antarctic in 1959 and first watching in awe and mystic joy the wondrous auroral displays. The dour polar explorer Robert Scott wrote of the auroras as being "divine signaling". Brian decided that he would use the new-fangled satellites to measure simultaneously both auroral light and the electrons and protons powered by unknown sources to spray the polar atmospheres and generate the vast and dancing displays of wondrous varied lights.

Within two years he fulfilled this dream with his little 40-pound satellite Injun 1. His many discoveries with various rockets and satellites included the discovery of the gigantic, globe-circling belt of high-energy fission electrons from the 1.4 megatonne nuclear explosion code-named "Starfish" on 9 July 1962. Starfish was 70 times more powerful than the Hiroshima and Nagasaki bombs that ended World War 2. The radiation was so intense that it caused solar cells on three NASA satellites to fail. The only surviving satellite was Brian's little Injun 1 where he had designed the solar cell array to be cheap, low-efficiency cells he used as part of the thermal control.

Brian was invited to be one of the seven scientists chosen from 90 proposals for experiments to be put on the moon by the Apollo astronauts as remote scientific bases. He also invented a matchbox-sized Dust Detector which was deployed on the moon by Apollo 11, 12, 14 and 15. His recent renewed research into lunar dust is widely acclaimed, as a major contributor to planning future lunar missions. When he invented to device in 1966 there was little interest in research into lunar dust. Now it is recognized as the Number 1 environmental problem on the moon.

Brian's delight in the joys of science, and almost 40 years of high-level environmental and strategic analyses, give him particular insights into a wide variety of community concerns, including issues of climate change.

Tickets: \$125.00

Tickets sell very quickly to this wonderful event so **DON'T MISS OUT.**

For more information or to make booking you can enquire on [info@teslaforum.com](mailto:info@teslaforum.com) or call 0401 302 340 or 0407 981 580

## Dr Brian O'Brian –

- Deputy Chief - Physicist of the Australian National Antarctic Research Expedition from early 1958 to mid-1959.
- Assistant then Associate Professor in Physics at State University of Iowa 1959-1963.
- Professor of Space Science at Rice University in Houston, Texas, 1963-1968
- Visiting Professor, University of Sydney, 1964 and again 1969-70
- Foundation Director & Chairman, Environmental Protection Authority, Perth 1971-77
- Managing Director of Brian J. O'Brien & Associates Pty Ltd from 1978-present
- Dr O'Brien has made discoveries and inventions in many fields. He has written about 500 scientific papers, several books and monographs, and about 1,000 reports, with many articles in news media, radio and television interviews etc. He has drafted 10 major Acts of Parliament on environment, National Parks, river and estuarine management, and water resources, management and supply, appeared before Senate and other enquiries on issues including broadcasting, communications satellites, greenhouse and environment.
- Three years after being lost alone for 3 days in the darkness of an unexplored cave at Yarrangobilly, Brian was elected first President of the Australian Speleological Federation in 1956. An explorer in the Antarctic, he later ran 3 rocket-launching expeditions from Fort Churchill in the Arctic to explore auroras. His pro-bono work includes starting Greening Australia (WA) in his Floreat studio, plus assisting his wife Avril in her award-winning 150 Heritage Trails around WA. He was a Councilor of the National Trust for many years. He convinced the W.A. Government in 1980 to set up the Satellite Advisory Committee to improve communications for regional and remote areas of Western Australia, and pioneered many successful ways to "bridge the communications gap" between urban and remote, often wealth-creating, communities. He began and is co-coordinator of the Rotary East Java Hearing Project, establishing the first public hearing centre in Indonesia, which after 7 years' effort, was opened in Surabaya on 18 May, 2001, and continues with synergistic successes in both the Dr Soetomo Hospital and the Karya Mulya Deaf School. With a long-held skepticism on greenhouse zealotry he finally convinced the W.A. Government to allot \$1.7 million in 1998 for research analyses of climate change from both natural and human causes. This began the Indian Ocean Climate Initiative (IOCI), now in its third stage, with funding of \$4million over 4 years from each of the State and Federal Governments.
- Brian's awards include the NASA Medal for Exceptional Scientific Research, the Paul Harris (Rotary) Medal plus Sapphire, and the Centennial Medal from the Australian Government. He was elected Fellow of the Australian Academy of Applied Sciences and Technological Engineering in 1993. He has been listed in Who's Who in the World for many years. Keynote speaker in Canberra, Washington, New York, Paris, Vienna, Warsaw, Belgrade, Vancouver, London, Houston, Bergen and many other locations.
- Brian's lifelong pro bono hobby is trying to introduce and promote ethics, intellectual rigour, pursuit of excellence and common sense into Governments and their bureaucracies. He is trying to complete his autobiography Cave and Moon: Saving Spaceship Earth. He has 5 experiments on the Moon, one being a radiation instrument. After two other experiments of his burned up in the aborted Apollo 13 mission, the conjunction of his op-ed analysis of the re-entry on April 18, 1970 and of the first "Earth Day" on April 22, led him to evolve his career specialization from space exploration to conservation and the environment, with considerable synergies.
- Brian consistently uses overarching "systems analysis" approaches to strategic and environmental issues, as he did with his space research including Apollo experiments and small research satellites Injun 1, 2 and 3 and Aurora 1, where the engineering frequently pioneered as the science always did. Injun 1 was the first research satellite to use digital telemetry, "talking" directly to a computer and hence to Brian, with feedback commands. Amongst its many discoveries was the globe-circling artificial radiation belt of fission electrons from the 1.4 Megatonne nuclear explosion "Starfish" in 1962. The resultant Electromagnetic Pulse (EMP) from Starfish, a device 70 times more powerful than the Hiroshima and Nagasaki explosions, led to Pentagon funding of inter-computer communications that ultimately led to the Internet.

